

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) An injector~~A filter apparatus~~, comprising:
~~a housing~~~~fluid passage~~~~body~~ that has an inner surface defining a bore; and
a filter that fits in the bore of the ~~fluid passage body~~,
wherein the filter includes:
an inlet section which is fixed in the bore of the ~~fluid passage body~~ at a peripheral surface thereof;
a filter section integral with the inlet section and having a plurality of holes to filter fluid; and
a closed end section integral with the filter section, wherein:
the filter section is located between the inlet section and the closed end section,
the filter section defines a tubular fluid passage with the inner surface of the ~~fluid passage body~~housing,
the tubular fluid passage has a cross-sectional area, which is equivalent to or smaller than a summation of cross-sectional areas of the holes of the filter section, so that fluid flow is regulated through the tubular fluid passage, and
the inlet section defines an opening in an opposite end of the filter with respect to the closed end section, and
fluid enters into the opening of the inlet section, passes through an inside of the filter section, passes through the plurality of holes, and flows through the tubular fluid passage toward a downstream of the tubular fluid passage,
the closed end section is shaped so that a cross-sectional area between an outer surface of the closed end section and the inner surface of the ~~housing~~~~fluid passage~~~~body~~ increases gradually with respect to a fluid flow direction in the downstream of the tubular fluid passage.

2. (Currently amended) An injector~~A filter apparatus~~ according to claim 1, wherein the closed end section is approximately hemispherically-shaped, so that a diameter of the closed end section is decreased toward the fluid flow direction.
3. (Currently amended) An injector~~A filter apparatus~~ according to claim 1, wherein the closed end section is approximately conically-shaped, so that a diameter of the closed end section is decreased toward the fluid flow direction.
4. (Currently amended) An injector~~A filter apparatus~~ according to claim 1, wherein each of the holes is formed so that a diameter thereof is larger at a radially outer side of the filter section than at a radially inner side of the filter section.
5. (Currently amended) An injector~~A filter apparatus~~ according to claim 4, wherein each of the plurality of holes is tapered to have the diameter gradually increasing toward the outer side of the filter section.
6. (Currently amended) An injector~~A filter apparatus~~ according to claim 4, wherein each of the plurality of holes is stepped to have the diameter gradually increasing toward the outer side of the filter section.
7. (Currently amended) An injector~~A filter apparatus~~ according to claim 4, wherein the plurality of holes is shaped in different shapes.
8. (Currently amended) An injector~~A filter apparatus~~ according to claim 4, wherein each of said holes is shaped in two shapes, said two shapes being a combination of any two of an approximate hemisphere, a straight bore and a tapered bore.

Claim 9. (Canceled).

10. (Currently amended) An injector A filter apparatus according to claim 1, wherein the closed end section has no hole to disable flow of the fluid in an axial direction.

11. (Currently amended) An injector A filter apparatus, comprising:
a housing fluid passage body that has an inner surface defining a bore therein; and
a filter that fits in the bore of the fluid passage body,
wherein the filter includes:
an inlet section fixed in the bore of the fluid passage body at a peripheral surface thereof;
a filter section integral with the inlet section and having a plurality of holes to filter fluid; and
a closed end section integral with the filter section, wherein:
the filter section is located between the inlet section and the closed end section,
the filter section defines a tubular fluid passage with an the inner surface of the fluid passage body housing,
the tubular fluid passage has a cross-sectional area, which is equivalent to or smaller than a summation of cross-sectional areas of the holes of the filter section, so that fluid flow is regulated through the tubular fluid passage, fluid flows from an opening of the inlet section on an opposite side of the filter with respect to the closed end section, and flows into an inside of the filter section, and
the fluid flows from the inside of the filter section to the tubular fluid passage through the plurality of holes.

Claims 12-16. (Canceled)

17. (Currently amended) An injector ~~The filter~~ apparatus according to claim 1, wherein the tubular fluid passage is located upstream of the closed end section with respect to fluid flow.

18. (Currently amended) An injector ~~The filter~~ apparatus according to claim 1, wherein the cross-sectional area of the tubular fluid passage is substantially constant with respect to fluid flow.

19. (Currently amended) An injector ~~The filter~~ apparatus according to claim 1, wherein the cross-sectional area of the tubular fluid passage is equivalent to or smaller than a summation of cross-sectional areas of the holes at a peripheral surface of the filter section.

20. (Currently amended) An injector ~~The filter~~ An injector apparatus according to claim 11, wherein the tubular fluid passage is located upstream of the closed end section with respect to fluid flow.

21. (Currently amended) An injector ~~The filter~~ apparatus according to claim 11, wherein the cross-sectional area of the tubular fluid passage is substantially constant with respect to fluid flow.

22. (Currently amended) An injector ~~The filter~~ apparatus according to claim 11, wherein the cross-sectional area of the tubular fluid passage is equivalent to or smaller than a summation of cross-sectional areas of the holes at a peripheral surface of the filter section.

23. (New) The injector according to claim 1, wherein each of the plurality of holes is in a substantially circular shape.

24. (New) The injector according to claim 1, wherein the plurality of holes are disposed along a substantially helical line on a peripheral surface of the filter section.

25. (New) The injector according to claim 24, wherein the plurality of holes are disposed at a substantially regular interval along the substantially helical line.

26. (New) The injector according to claim 11, wherein each of the plurality of holes is in a substantially circular shape.

27. (New) The injector according to claim 11, wherein the plurality of holes are disposed along a substantially helical line on a peripheral surface of the filter section.

28. (New) The injector according to claim 27, wherein the plurality of holes are disposed at a substantially regular interval along the substantially helical line.